## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023721 Address: 333 Burma Road **Date Inspected:** 19-May-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Zhu Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD** 

#### WELDING:

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 066443 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AH-004; located On Orthotropic Box Girder (OBG) KP3009A to X3897A CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qinxiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20882.ZPMC Quality Control (QC) Mr. An Qinxiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

#### Segment 13BW

This QA Inspector observed ZPMC qualified welding personnel identified as 066156 perform Shielded Metal Arc

## WELDING INSPECTION REPORT

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Welding (SMAW), weld joint identified as SEG3014B-240; located On Orthotropic Box Girder (OBG) VP3012A to X4498F CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qinxiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR21025. ZPMC Quality Control (QC) Mr. An Qinxiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

#### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 067707 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AH-159; located On Orthotropic Box Girder (OBG) KP3006A to X3782C CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20968. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

#### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 067904 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AH-168; located On Orthotropic Box Girder (OBG) Bottom Plate to Bottom Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20968. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

## Segment 13BW

This QA Inspector observed ZPMC qualified welding personnel identified as 040270 perform Shielded Metal Arc Welding (SMAW), weld joint identified as AH3002-025; located On Orthotropic Box Girder (OBG) Edge Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qinxiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20877. ZPMC Quality Control (QC) Mr. An Qinxiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

#### Segment 13BW

This QA Inspector observed ZPMC qualified welding personnel identified as 044541 perform Shielded Metal Arc Welding (SMAW), weld joint identified as AH3002-027; located On Orthotropic Box Girder (OBG) Edge Plate to Arch Housing CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qinxiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20878. ZPMC Quality Control (QC) Mr. An Qinxiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract

# WELDING INSPECTION REPORT

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documents.





## **Summary of Conversations:**

No significant conversations were reported on this date.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey - 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer